Elytra, Tokyo, **33** (2): 417–423, November 19, 2005

Two New Tenebrionid Species of a New Genus (Coleoptera, Tenebrionidae, Strongyliini) from the Oriental Region

Kimio Masumoto

Institute of Human Living Sciences, Otsuma Women's University, Tokyo, 102–8357 Japan

and

Stanislav Bečvář

Institute of Entomology, Czech Academy of Sciences, Branišovská 31,
370 05, České Budějovice, Czech Republic

Abstract Two new species of a new tenebrionid genus *Bremerianus* are described under the names *Bremerianus cameronensis* gen. et sp. nov. and *B. baehri* sp. nov.

In 1995 and 1998, one of the authors (S. B.) collected a series of specimens of unknown tenebrionid species from the Cameron Highlands, the Malay Peninsula, in the evening and after midnight in the same microhabitat. One specimen was captured using a light trap in the same area. He found them in yellow rotted but dried places of a large living tree and on the trees nearby. This habitat was found in a forest about 200 m below the top of the Jasar Mountains. In Sumatra, a second species was collected at night in a forest. All the specimens were found from the bark of a large, old tree, which was relatively free of injury or rotted spots. Later, when the authors visited the Zoologische Staatssammlung, Munich, Dr. Martin Baehr permitted them to loan additional materials.

They are similar in their body structure to the adults of *Strongylium* and to the Coelometopinae among others. The second author was unable to determine their taxonomic position, and asked the first author (K. M.) for collaboration in clarifying their true identity. They spent about two years for determining their taxonomic position, with advice of their colleague specialists of the Tenebrionidae. Finally they concluded that these two species were new to science and belonged to a new genus of the Strongyliini.

Before going further, the authors wish to express their gratitude to Dr. Martin Baehr, the Zoologische Staatssammlung, Munich, Dr. Ottó Merkl, the Hungarian Natural History Museum, Budapest, and Dr. Wolfgang Schawaller, Staatliches Museum für Naturkunde, Stuttgart. They also express their gratitude to Dr. Makoto Kiuchi, Tsukuba City, for taking clear photographs inserted in this paper.

The holotypes to be designated will be deposited in the Natural History Museum, Prague (NHMP) and the Zoologische Staatssammulung, Munich (ZSM), and some paratypes will be deposited in the National Science Museum (Nat. Hist.), Tokyo, the Hungary Natural History Museum, Budapest, and the Staatliches Museum für Naturkunde, Stuttgart.

Bremerianus gen. nov.

Type species: *Bremerianus cameronensis* sp. nov.

Body oblong-ovate, rather strongly convex dorsad. Head rather steeply declined anteriad. Antennae rather slender, feebly bolder in several apical segments, with sensory pores. Eyes medium-sized for a member of the Strongyliini.

Pronotum rounded laterad but noticeably narrowed and subparallel-sided in basal part; apex finely rimmed in lateral parts; base rather boldly ridged; sides bordered from the ventral parts by fine ridges in basal parts, with areas below ridges vertically scooped out, and also bordered with impressions in middle, the borders disappearing in anterior parts; front angles rounded, hind angles acutely protruded obliquely laterad in dorsal view; disc with anterior part gently convex, closely, finely punctate, each puncture with a suberect hair, and also with posterior part subquadrately depressed, the depressions deepened along basal border, scattered with somewhat umbilicated punctures. Scutellum sublinguiform.

Elytra oblong-ovate; dorsum rather strongly convex, weakly depressed at interior part of basal 1/3; disc with nine punctato-striae (including the marginal stria), 8th stria disappearing in the basal parts; intervals rather strongly convex, closely scattered with minute punctures, each with a suberect hair; humeri weakly convex; apices gently produced; epipleura complete but tapered apicad, finely ridged along interior borders. Hind wings present.

Terminal segment of labial palpus gently dilated apicad with truncate apex; terminal segment of maxillary palpus rather large with truncate apex; labium somewhat trapezoidal; gula smooth, bordered by impressions. Prosternum coarsely rugoso-punctate, feebly ridged in middle along anterior border, raised between coxal cavities, deeply grooved along medial line, gradually inclined posteriad, with triangular prosternal process at base; mesosternum depressed in anterior part, rather strongly raised along mesocoxal cavities; metasternum weakly convex in lateral parts, with a longitudinal groove along medial line. Abdomen with visible segments III and IV with membranes along apical margins.

Legs medium-sized. Protrochanter medium-sized, somewhat triangular; profemur subclavate; protibia nearly straight, with intero-ventral face feebly gouged in basal 1/3; protarsi feebly becoming bolder to each apex. Mesotrochanter small, somewhat triangular; mesofemur subclavete, slenderer than profemur; mesotibia weakly curved, with interior face gently gouged in apical half; mesotarsi weakly becoming bolder to each apex. Metatrochanter rather small, nearly triangular; metafemur subclavate, slenderer

than mesofemur; metatibia nearly straight, with interior side feebly gouged in basal part; metatarsi very weakly becoming bolder to each apex. Claws falciform. Male genitalia elongated subfusiform in dorsal view.

Notes. In the members of this new genus, the body is commonly subfusiform in dorsal view and rather strongly convex above, the head is rather steeply declined anteriad, the antennae are rather slender with stellate sensorial pores in apical segments, and legs are rather slender, which suggest that they belong to the tribe Strongyliini. However, the pronotum is very peculiar in shape as noted above.

In the East Asian members of the Strongyliini, *Phymatosoma* possesses rather subfusiform body, but its pronotum is quite simple in shape, rather flattened and subquadrate. Members of the species-group of *Strongylium pallidonotatum* Pic, 1917, also possess convex subfusiform body, but their pronotum is neither strongly narrowed in the basal part nor ridged along the lateral margin, and not compressed from both sides.

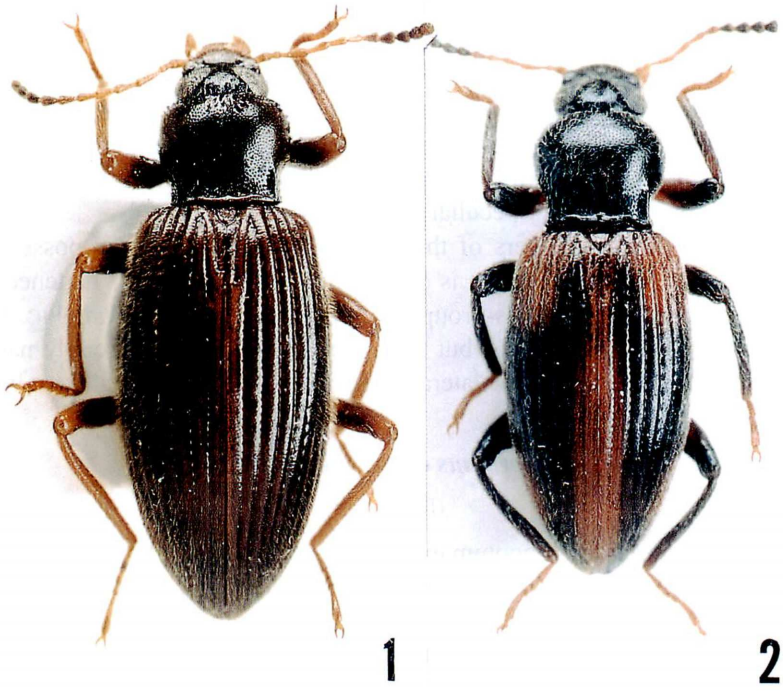
Bremerianus cameronensis sp. nov.

(Figs. 1, 3–4)

Dark brown, head and pronotum except for each basal part brownish black, mouth parts, six basal segments of antennae, apical half of terminal one, and tarsi yellowish brown; dorsal surface gently shining, ventral surface rather alutaceous, each surface covered with hairs, those on dorsal surface finer and darker, those in lateral parts longer and pale yellowish. Body oblong-ovate, rather strongly convex dorsad.

Head subhypognathous, rather elliptical in antero-dorsal view, closely punctate; clypeus semicircular, flattened in basal part, bent ventrad in middle, and truncate at apex; fronto-clypeal border finely and clearly sulcate; genae gently raised and roundly produced antero-laterad, preocular areas feebly concave; frons rather widely T-shaped, steeply inclined anteriad, shallowly concave along midline in posterior part, interocular space about half the width of the transverse diameter of an eye; vertex weakly convex. Eyes rather obliquely inlaid into head, moderately strongly convex laterad. Antennae slightly clavate, medium in length and reaching basal 1/5 of elytra, segments VII to X gently dilated to each apex and with sensory pores, ratio of the length of each segment from base to apex: 0.26, 0.11, 0.36, 0.28, 0.24, 0.25, 0.22, 0.23, 0.19, 0.17, 0.21.

Pronotum 1.3 times as wide as long; apex nearly straight in dorsal view, finely rimmed in lateral parts; base sinuous in lateral parts, finely bordered and rather boldly ridged, the ridge punctulate and sinuous on each side of interior margin; sides roundly produced laterad in anterior 2/3, narrowed, subparallel-sided and rather sharply ridged in posterior 1/3, the areas below ridges vertically scooped out; front angles rounded and finely rimmed, hind angles acutely protruded obliquely laterad in dorsal view; disc with anterior 2/3 gently convex, closely, finely punctate, each puncture with a suberect hair, and also with posterior 1/3 subquadrately, weakly depressed, the depressions deepened along basal border, scattered with somewhat umbilicate punctures. Scutellum triangular with feebly rounded sides, weakly convex and smooth in middle, punc-



Figs. 1–2. Habitus of *Bremerianus* spp. — 1. *Bremerianus cameronensis* gen. et sp. nov., male, holotype; 2, *B. baehri* sp. nov., male, holotype.

tulate in lateral parts.

Elytra oblong-ovate, 1.7 times as long as wide, 3.6 times the length and 1.5 times the width of pronotum, widest at basal 3/7; dorsum rather strongly convex, highest at basal 1/3, and weakly depressed at the interior part of basal 1/3; disc with nine punctato-striae (including the marginal striae), 8th striae disappearing in the basal parts, the punctures in striae small and notching intervals; intervals rather strongly convex, closely scattered with minute punctures, each with a suberect hair; humeri weakly convex; apices gently produced; epipleura complete but tapering apicad, finely ridged along interior borders. Hind wings present.

Terminal segment of labial palpus gently dilated apicad with truncate apex; terminal segment of maxillary palpus larger with truncate apex; labium somewhat obtrapezoidal, alutaceous, sparsely punctulate, raised antero-medially; gula smooth, bordered by impressions. Prosternum coarsely rugoso-punctate, feebly ridged in middle along anterior border, raised between coxal cavities, deeply grooved along medial line, gradually inclined posteriad, with triangular prosternal process at base; mesosternum depressed in anterior part, rather strongly raised along mesocoxal cavities, covered with

isodiametric microsculpture, rugoso-punctate; metasternum weakly convex in lateral parts, rather smooth and closely punctate in internal parts, covered with isodiametric microsculpture and rather closely punctate in external parts, with a longitudinal groove along medial line. Abdomen covered with isodiametric microsculpture, closely punctate and finely haired; visible segments III and IV with membranes along apical margins.

Legs medium-sized. Protrochanter medium-sized, somewhat triangular; profemur subclavate; protibia nearly straight, with intero-ventral face feebly gouged in basal 1/3; protarsi feebly becoming bolder to each apex, ratio of the length of each segment from base to apex: 0.12, 0.09, 0.10, 0.12, 0.42. Mesotrochanter small, somewhat triangular; mesofemur subclavete, slenderer than profemur; mesotibia weakly curved, with interior face gently gouged in apical half; mesotarsi feebly becoming bolder to each apex, ratio of the length of each segment from base to apex: 0.21, 0.11, 0.09, 0.10, 0.52. Metatrochanter rather small, nearly triangular; metafemur subclavate, slenderer than mesofemur; metatibia nearly straight, with interior side feebly gouged in basal 1/4; metatarsi very slightly becoming bolder to each apex, ratio of the length of each segment from base to apex: 0.36, 0.16, 0.14, 0.57. Claws falciform.

Male genitalia elongated subfusiform, 3.45 mm in length, 0.75 mm in width, gently curved in lateral view; fused lateral lobes 1.64 mm in length, weakly narrowed anteriad in basal 1/4, rather strongly so in medial parts, and prolonged in apical 1/4, with somewhat truncate apices.

Body length: 6.3–6.8 mm.

Holotype: ♂, "W. Malaysia, Pahang, Cameron Highlands, 12~15–II–1998, Tanah Rata Gn. Jasar, lgt. S. Bečvář" (NHMP). Paratypes: 7 exs., same data as for the holotype; 3 exs., same locality (1,400–1,500 m), 20~25–I–1995, lgt. S. Bečvář J. & S.; 1 ex., "Malaysia, Cameron Highlands, Tanah Rata, 1,600 m, J. Horák leg., 26–I~10–II–2000"

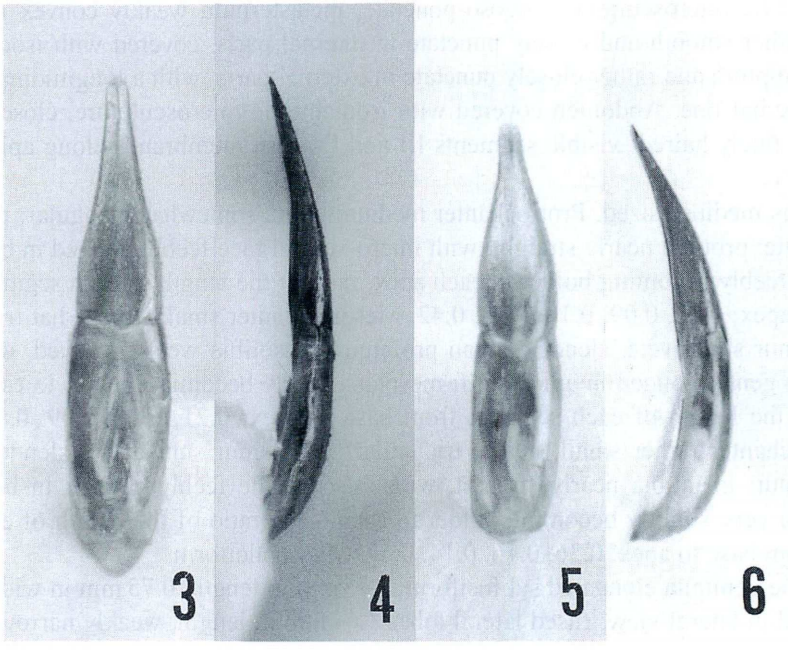
Bremerianus baehri sp. nov.

(Figs. 2, 5–6)

This new species resembles the preceding one, *Bremerianus cameronensis* sp. nov., but can be distinguished from it by the following characteristics:

Body smaller (5.6 mm in length) and stouter; brownish black, elytra with areas along 1st intervals in anterior 1/3 and also along 2nd intervals in posterior 2/3, latero-basal and latero-posterior parts reddish brown.

Clypeus with basal part a little more strongly flattened and forming a transverse elliptical space, apical part more steeply declivous; genae and frons similar to those of *B. cameronensis*; vertex more distinctly with a longitudinal impression medially, interocular space about 1/4 the width of the transverse diameter of an eye. Eyes more strongly convex laterad, more obliquely inlaid into head. Antennae similar to those of the preceding new species, ratio of the length of each segment from base to segment



Figs. 3–6. Male genitalia. — 3–4, *Bremerianus cameronensis* gen. et sp. nov., 3, dorsal view, 4, lateral view; 5–6, *B. baehri* sp. nov., 5, dorsal view, 6, lateral view.

IX (the remaining two lost in the holotype): 0.18, 0.09, 0.29, 0.19, 0.17, 0.17, 0.16, 0.16, 0.15, –, –.

Pronotum 1.2 times as wide as long; apex rimmed in lateral parts, the rim interrupted in middle; base sinuous in lateral parts, weakly emarginate in middle opposite to scutellum (similar to that in *B. cameronensis*), more clearly bordered from disc, ridged, the ridge smoother and impunctate widely in middle; disc with anterior part moderately convex, vaguely, longitudinally impressed along median line, thus forming two low swollen parts, smoother, rather closely, evenly punctate, and with posterior part depressed and coarsely punctate; lateral margins with apical 3/4 more roundly produced laterad, bordered from ventral parts only in front angular areas, also with basal 1/4 subparallel-sided and distinctly longitudinally ridged. Scutellum triangular with feebly rounded sides, weakly convex, smooth, sparsely scattered with small punctures laterally.

Elytra a little slenderer, 1.7 times longer than wide, 3.3 times the length and 1.5 times the width of pronotum; dorsum gently convex, highest at basal 3/8, covered with a little finer bent hairs; disc with strial punctures more closely set; intervals more widely, gently elevated, punctulate, each puncture with a bent hair; parts from 7th intervals to lateral margins enveloping venter of body; humeri less noticeably swollen; apices gently produced (similar to those in *B. cameronensis*).

Anal segment without special modification, similar to that of the previous new species. Legs slightly bolder; male protibia with ventral face feebly gouged in apical 1/3; male mesotibia weakly curved ventrad; male metatibia with internal face feebly gouged in basal half; ratios of the lengths of pro-, meso- and metatarsomeres: 0.09, 0.04, 0.05, 0.06, 0.38; 0.11, 0.06, 0.06, 0.07, 0.34; 0.19, 0.09, 0.08, 0.38.

Male genitalia subfusiform, 1.0 mm in length, 0.2 mm in width, feebly constricted at the border between basal piece and lateral lobes, gently curved in lateral view; fused lateral lobes somewhat nib-shaped, 0.65 mm in length, with apices weakly prolonged and not acute.

Holotype: ♂, "W. Malaysia; Johor Gunung Ladang, Mt., 2°22′N, 102°37′E, 14～16–I–2000. D. HAUCK leg." (ZSM). Paratypes: 1 ex., same data as for the holotype; 1 ex., "S. Sumatra, Lampung Prov., Bukit Barisan Selatan Nat. Park, 5°4′E, 104°4′E, 600 m, 5 km SW Liwa, 7～17–II–2000, J. BEZDĚK leg."; 1 ex., "Indonesia, West Sumatra, Bukit Lawang, 10～16–IV–1966, lgt. S. BEČVÁŘ"; 1 ex., "Malaysia; Tioman; 400 m, Kampong Tekek-K. Juara, 9–III–1998, 2°48′N, 104°11′E, DEMBICKÝ & PACHOLÁTKO leg."

Notes. The specific name is given after Dr. Martin BAEHR, Zoologische Staatssammlung, Munich, who provided the authors with a series of the type materials of this new species.

要　　約

益本仁雄・S. BEČVÁŘ：東洋区産ナガキマワリ族の1新属2新種について．――― 西マレーシアおよび西スマトラで採集されたナガキマワリ族を検討した結果，新属に属する2新種が認められた．新属として*Bremerianus*をたて，*Bremerianus cameronensis* gen. et sp. nov.および*B. baehri* sp. nov.を記載した．

References

PIC, M., 1917. Descriptions abrégées diverses. *Mél. exot.-ent. Moulins*, (23): 2–20.

LAPORTE F. L. N. DE CAUMONT (DE CASTELNAU) & G. A. BRULLÉ, 1831. Monographie du genre *Diaperis*. *Annls. Sci. nat.*, **23**: 325–410.